

Title (en)

Azole derivatives useful in controlling plant diseases and regulating plant growth.

Title (de)

Azol-Derivate verwendbar zur Kontrolle von Pflanzenkrankheiten und Regulierung von Pflanzenwachstum.

Title (fr)

Dérivés d'azoles utilisables dans le contrôle des maladies de plantes et pour la régulation de croissance.

Publication

EP 0267778 A2 19880518 (EN)

Application

EP 87309925 A 19871110

Priority

- JP 16112687 A 19870630
- JP 26555986 A 19861110
- JP 27127787 A 19871027

Abstract (en)

Azole derivatives represented by the formula (I): <CHEM> wherein R<1> and R<2> each independently represents a (C1 - C5) alkyl group or a hydrogen atom; X represents a halogen atom, a (C1 - C5) alkyl group or a phenyl group; n represents 0, 1 or 2 and A represents a nitrogen atom or CH, provided that R<1> is not a hydrogen atom when R<2> is a hydrogen atom; acid addition salts thereof and metal complexes thereof; are useful as fungicides and as plant growth regulators.

IPC 1-7

A01N 43/50; A01N 43/653; C07C 13/28; C07C 25/18; C07C 49/657; C07C 49/697; C07C 69/74; C07D 233/60; C07D 249/08; C07D 303/04; C07D 303/08

IPC 8 full level

A01N 43/50 (2006.01); **A01N 43/653** (2006.01); **C07C 1/00** (2006.01); **C07C 13/28** (2006.01); **C07C 17/00** (2006.01); **C07C 17/26** (2006.01); **C07C 25/18** (2006.01); **C07C 45/00** (2006.01); **C07C 45/67** (2006.01); **C07C 49/657** (2006.01); **C07C 49/697** (2006.01); **C07C 67/00** (2006.01); **C07C 69/716** (2006.01); **C07D 233/60** (2006.01); **C07D 249/08** (2006.01); **C07D 303/04** (2006.01); **C07D 303/08** (2006.01); **C07D 521/00** (2006.01)

CPC (source: EP US)

A01N 43/50 (2013.01 - EP US); **A01N 43/653** (2013.01 - EP US); **C07C 13/28** (2013.01 - EP US); **C07C 25/18** (2013.01 - EP US); **C07C 45/676** (2013.01 - EP US); **C07C 49/657** (2013.01 - EP US); **C07C 49/697** (2013.01 - EP US); **C07D 231/12** (2013.01 - EP US); **C07D 233/56** (2013.01 - EP US); **C07D 249/08** (2013.01 - EP US); **C07D 303/04** (2013.01 - EP US); **C07D 303/08** (2013.01 - EP US)

C-Set (source: EP US)

C07C 45/676 + C07C 49/697

Citation (applicant)

- JP S57114577 A 19820716 - ICI LTD
- US 4507140 A 19850326 - SUGAVANAM BALASUBRAMANYAN [GB]
- EP 0052424 A2 19820526 - ICI PLC [GB]
- JP S57126479 A 19820806 - ICI LTD
- EP 0052425 A2 19820526 - ICI PLC [GB]
- JP S5716868 A 19820128 - BAYER AG
- US 4532341 A 19850730 - HOLMWOOD GRAHAM [DE], et al
- EP 0040345 A1 19811125 - BAYER AG [DE]
- JP S58189171 A 19831104 - ICI LTD
- US 4503062 A 19850305 - GRAVESTOCK MICHAEL B [GB]
- EP 0094146 A1 19831116 - ICI PLC [GB]
- JP S60215674 A 19851029 - ICI LTD
- EP 0153797 A1 19850904 - ICI PLC [GB]
- JP S62149667 A 19870703 - KUREHA CHEMICAL IND CO LTD
- DE 3630840 A1 19870312 - KUREHA CHEMICAL IND CO LTD [JP]
- FR 2587028 A1 19870313 - KUREHA CHEMICAL IND CO LTD [JP]
- IT 1197478 B 19881130 - KUREHA CHEMICAL IND CO LTD [JP]
- BE 905427 A 19870312 - KUREHA CHEMICAL IND CO LTD
- NL 8602316 A 19870401 - KUREHA CHEMICAL IND CO LTD
- ORG. SYN., vol. 49, 1968, pages 78
- J. AMER. CHEM. SOC., 1965, pages 1353
- ORG. SYN., vol. 40, 1966, pages 66
- J. ORG. CHEM., vol. 28, 1963, pages 1128
- ORG. SYN. COLL., vol. 4, 1963, pages 552
- ORG. SYN., vol. 45, 1965, pages 7
- J. ORG. CHEM., vol. 29, 1964, pages 2781

Cited by

JPWO2012169516A1; US5504096A; US6114539A; US6080775A; EP2784067A4; US6166059A; EP2233001A3; US5714507A; EP0361560A1; EP0467791A1; FR2662911A1; EP2746256A1; CN100450355C; US5380743A; US5639918A; EP0488348A1; US5200535A; FR2649101A1; EP0731083A1; US5681979A; EA010135B1; US5324740A; US5407952A; US5432190A; US5462957A; FR2649700A2; US6114368A; EP0517212A1; EP0359305A1; US5075513A; EP0329397A1; WO2010142779A1; US5599828A; US5929102A; US5225430A; EP0488396A3; US5321038A; EP0474303A1; FR2641277A1; EP0324646A3; US6057353A; US5262543A; CN102639509A; AU2010329332B2; EP2719281A4; EP2816041A1; EP2816042A1; EA023393B1; EP0648751A1; US5446167A; EP0526206A1; US5393770A; EP0466612A1; FR2663195A1; US5292764A; EP0467792A1; FR2663196A1; EA016291B1; AU2008244436B2; CN103562187A; KR20140011406A; EP2757097A4; EP0654265A1; US5726196A; US5789432A; EP0537909A1; US5151550A; US5256683A; EP0294222A3; US5162356A; CZ303562B6; WO2010122169A1; WO2014095249A1; WO2008132021A3; WO9603390A1; WO2010149414A1; WO2011070771A1; WO9603389A1; WO2010122167A1; US9814236B2; WO2009040397A1; EP2392662A2; WO2014056780A1; EP2258177A2; US9278941B2; US9999219B2; EP2835052A1; EP2979549A1; US6051592A; EP0622020A1; FR2704388A1; EP0571267A1; EP0433780A1; EP0357404A3; GB2225006A;

GB2225006B; US5142061A; EP2713749A4; US8288315B2; US9440933B2; EP1782691A2; EP2481284A2; US10899932B2; US9253983B2; US9801369B2; US6245794B1; US6329411B1; WO2010146111A1; US8871679B2; WO2010149758A1; WO2015036058A1; US9750249B2; US7166750B1; WO2012127009A1; US8758788B2; EP3378313A1; WO2010146113A1; WO2011026796A1; US8710090B2; US9145351B2; US9162966B2; WO0200608A3; WO2004006666A3; WO0112580A1; WO9638423A1; WO2010146112A1; WO2012084670A1; WO2013189801A1; WO2017001252A1; US9750254B2; EP3300602A1; EP3646731A1; EP0682865A2; US6306888B1; US6455563B1; WO2014095994A1; EP2783569A1; US9826738B2; EP3498098A1; US6274610B1; EP0357404A2; EP2489265A2; EP2489266A2; EP2489267A2; EP2489268A2; WO2012162846A1; WO2013030338A2; EP2679094A1; EP2679095A1; EP2679096A1; WO2015036059A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0267778 A2 19880518; EP 0267778 A3 19890419; EP 0267778 B1 19930324; AU 584530 B2 19890525; AU 8096187 A 19880519; BR 8706104 A 19880614; CA 1331006 C 19940726; DE 3784999 D1 19930429; DE 3784999 T2 19930701; DK 171542 B1 19961230; DK 588687 A 19880511; DK 588687 D0 19871110; ES 2053564 T3 19940801; JP H0193574 A 19890412; JP H0625140 B2 19940406; US 4938792 A 19900703; US 5028254 A 19910702; US 5159118 A 19921027

DOCDB simple family (application)

EP 87309925 A 19871110; AU 8096187 A 19871110; BR 8706104 A 19871110; CA 551296 A 19871106; DE 3784999 T 19871110; DK 588687 A 19871110; ES 87309925 T 19871110; JP 27127787 A 19871027; US 11508487 A 19871030; US 51417090 A 19900424; US 69140691 A 19910425